

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method for fabricating a ferroelectric memory device, comprising the steps of:

forming a first insulation layer on a substrate;

forming a storage node contact contacting to a partial portion of the substrate by passing through the first insulation layer;

forming a ~~stack pattern of a lower electrode contacting to first conductive layer and a hard mask on~~ the storage node contact ~~and a hard mask on~~ the first insulation layer, wherein the first conductive layer is patterned by using the hard mask, thereby obtaining a stack pattern;

forming a second insulation layer on ~~an entire surface of the resulting structure including~~ the stack pattern;

planarizing the second insulation layer until a surface of the hard mask is exposed;

removing selectively the exposed hard mask to make a surface level of the lower electrode lower than that of the second insulation layer; and

forming sequentially a ferroelectric layer and an upper electrode on the second insulation layer and the lower electrode.

Claim 2 (Currently Amended): The method as recited in claim 1, wherein the hard mask is made of at least one of titanium nitride, and tantalum nitride or silicon oxide.

Claim 3 (Original): The method as recited in claim 1, wherein the step of making the surface level of the lower electrode lower than that of the second insulation layer proceeds by performing a wet etching process or a dry etching process to the hard mask.

Claim 4 (Original): The method as recited in claim 3, wherein the wet etching process uses one of cleaning agents such as SC-1 comprising ammonium hydroxide (NH_4OH), hydrogen peroxide (H_2O_2) and water (H_2O) in a ratio of about 1 to about 4 to about 20 and SPM comprising sulfuric acid (H_2SO_4) and hydrogen peroxide (H_2O_2) in a ratio of about 4 to about 1.

Claim 5 (Original): The method as recited in claim 3, wherein the dry etching process uses a mixed gas of argon (Ar) and chlorine (Cl).

Claim 6 (Original): The method as recited in claim 1, wherein the step of planarizing the second insulation layer until the surface of the hard mask is exposed includes the steps of:

planarizing a partial portion of the second insulation layer by performing a chemical mechanical polishing (CMP) process; and

performing an etch-back process to the second insulation layer to make the hard mask exposed.

Claim 7 (Original): The method as recited in claim 1, wherein the step of planarizing the second insulation layer until the surface of the hard mask is exposed proceeds by applying a CMP process or an etch-back process at once to the second insulation layer.